



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

15/2 8/3

Applicant: Fenn et al

Serial No: 08/890,490

Filed: July 09, 1997

Title: Frozen Food Product

Group: 1761

Examiner: C Nessler

Commissioner of Patents & Trademarks
Washington DC 20231

Declaration under 37CFR 1.132

I, Andrew Sztehlo, residing at Via Bernardo Cavallino 67, 80131 Naples, Italy declare and say:

1. I have a Bsc degree in Applied Chemistry from the University of Hertfordshire. I am a member of the Royal Society of Chemistry and a Chartered Chemist.
2. I am familiar with US patent application having the serial number 08/890,490.
3. US patent application having the serial number 08/890,490 teaches a frozen confectionery product comprising AFP, wherein the ice crystals in the product have an aspect ratio of greater than 1.9.
4. I am familiar with US patent number 5, 118, 792 from Warren et al. Warren et al discloses synthetic fusion proteins an example of which is Protein A-Saf 5. Further Warren et al disclose that such fusion proteins may be added to ice cream, frozen yoghurt, ice milk, sherbet, popsicles etc (see col 11, lines 60-62).

5. A pre-mix for preparing ice cream was made having the following formulation;

Ingredient	Weight %
Skimmed Milk Powder	10.7
Sucrose	13.9
Maltodextrine (MD 40)	4.3
Locust Bean Gum	0.15
Carageenan L100	0.02
Butteroil	8.6
Monoglyceride palmitate	0.3
Vanillin	0.01
Water	to 100

The pre-mix was split into two batches, one a control, and one to which 0.05 weight% Protein A-Saf 5 was added (post-pasteurisation).

The pre-mix was frozen using an Armfield FT25A scraped surface heat exchanger (from Armfield Ltd, Bridge House, West Street, Ringwood, Hampshire, BH24 1DY, UK) having a barrel volume of 300ml and an 80% solid dasher. The dasher speed was 240 rpm. The flow rate was 5.5 kg/hr for the pre-mix containing AFP and 6 kg/hr for the control. The extrusion temperature was -6.1°C. The overrun was 104% for the AFP containing composition and 117% for the control. The product was then hardened for 12 hours at -35°C before being stored at -20°C.

6. The aspect ratio was measured according to the protocol given in Example II of US application 08/890,490.
7. The Protein A-Saf 5 containing ice cream composition had an aspect ratio of 1.64. The control ice cream composition had an aspect ratio of 1.47.

8. I declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that wilful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code and that such wilful false statements may jeopardise the validity of this application or any patent issued therein.

Signed: Andrew Sztehlo

Dated: